Contents of Applied Physics B53

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Photophysics and Laser Chemistry

Arai S., Kactsu H., Isomura S.:

Practical separation of silicon isotopes by IRMPD of Si₂F₆. Appl. Phys. B 53/4, 199-202 (1991) PACS: 82.50

Bagayev S.N., Bezrodny A.E., Chebotayev V.P., Titov E.A.: Nonlinear interaction of crossing FM waves with a gas. Appl. Phys. B 53/1, 52-57 (1991) PACS: 33.70 42.10 42.60

Barwood G.P., Gill P., Rowley W.R.C.

Frequency measurements on optically narrowed Rb-stabilized laser diodes at 780 nm and 795 nm.

Appl. Phys. B 53/3, 142-147 (1991) PACS: 32.30 42.60 35.20

Berkovic G., Shvartsberg E .:

Phase measurements in surface nonlinear optics: The effect of laser beam quality.

Appl. Phys. B53/5&6, 333-338(1991) PACS: 42.65K 42.60

Beverly III R.E.:

Pulsed power modeling of very-large-aperture, transversedischarge CO2

Appl. Phys. B 53/3, 187-193 (1991) PACS: 42.55E 52.80 84.70

Beverly III R.E.:

Discharge ignition phenomena in CO2 and N2O lasers with preliminary filling of the interelectrode gap by electrons.

Appl. Phys. B 53/2, 101-107 (1991) PACS: 42.55E 52.80 53.35 Bhar G.C., Chatterjee U., Datta P.K., Das S., Feigelson R.S., Route R.K.: Noncritical detection of tunable CO₂ laser radiation into the green by

upconversion in silver thio-gallate.

Appl. Phys. B 53/1, 19-22 (1991) PACS: 42.65K 07.62 86.70

Carnal O., Faulstich A., Mlynek J.:

Diffraction of metastable helium atoms by a transmission grating. Appl. Phys. B 53/2, 88-91 (1991) PACS: 07.77 35.10 42.10

Christov I.P., Michailov N.I., Danailov M.B.:

Mode locking with spatial dispersion in the gain medium. Appl. Phys. B 53/2, 115-118 (1991) PACS: 42.60

Cockerham M.P., Frazier C.C., Guha S., Chauchard E.A.:

Second-harmonic generation in derivatives and analogs of benzophenone and chalcone

Appl. Phys. B53/5&6, 275-278(1991) PACS: 42.65'42.70

Cunin B., Heisel F., Miehé J.A.:

Stochstic analysis of synchroscan operations of a streak camera. Appl. Phys. B 53/3, 148-152 (1991) PACS: 02.50 42.60 42.80

Dai L.-K., Gou Y.-S., Yeh P., Gu C.:

Photorefractive mode coupling between two unidirectional ring oscilla-

Appl. Phys. B 53/3, 153-159 (1991) PACS: 42.65

Dimov S., Peik E., Walther H.:

A flashlamp-pumped 946 nm Nd: YAG laser.

Appl. Phys. B 53/1, 6-10 (1991) PACS: 42.55N 42.60

Doukas A.G., Zweig A.D., Frisoli J.K., Birngruber R., Deutsch T.F.: Non-invasive determination of shock wave pressure generated by optical

Appl. Phys. B 53/4, 237-245 (1991) PACS: 42.80 87.00 43.35

Eichler H.J., Barocsi A.Jakab L., Liu B.:

Acousto-optic mode-locker for Nd: lasers using paratellurite. Appl. Phys. B 53/3, 194-197 (1991) PACS: 78.20H 42.60

George T., Wu B., Dax A., Schneider M., Urban W.: Saturation stabilization of the CO fundamental-band laser.

Appl. Phys. B53/5&6, 330-332(1991) PACS: 42.50 42.55 42.72

Gnass D., Ernsting N.P., Schäfer F.P.: Sagnac effect in the colliding-pulse-mode-locked dye ring laser.

Appl. Phys. B 53/2, 119-120 (1991) PACS: 42.80M

Guha S., Kang K., Porter P.L.:

Two-photon absorption-induced thermal effects in platinum poly-ynes. Appl. Phys. B53/5&6, 308-313(1991) PACS: 42.65

Hammerich M., Vildrik-Sorensen L., Vries H. de, Henningsen J.: Photoacoustic measurements of Lorentz broadening in CO2 between 25° C and 450° C

Appl. Phys. B 53/3, 170-179 (1991) PACS: 33.70J 34.50 07.65

Harde H., Lehmitz H., Hattendorf-Ledwoch J., Blatt R.: Self-induced Zeeman coherences in a Paul trap.

Appl. Phys. B53/3, 131-137 (1991) PACS: 32.80P 35.80

Holtmann L., Krätzig E., Odoulov S.:

Coupling of orthogonally polarized waves in BaTiO3: Appl. Phys. B 53/1, 1-5 (1991) PACS: 42.20 42.70 78.20 Jiang H.-B.:

A free-electron laser pumped by the soliton laser.

Appl. Phys. B53/5&6, 347-349(1991) PACS: 42.55T 41.80 Johst K .:

Laser pulse sequence effects on selective ionization in three-level systems driven by coherent radiation fields.

Appl. Phys. B 53/1, 46-51 (1991 PACS: 33.80E 33.80

Karve R.S., Sarkar S.K., Rama Rao K.V.S., Mittal J.P.: TEA CO₂ laser-induced photodissociation of UF₆ via interspecies V-V transfer from multiple photon excited halomethanes

Appl. Phys. B 53/2, 108-114 (1991) PACS: 82.50 33.00

Kato S., Takeuchi K.:

IR multiple-photon dissociation by a focused uniform beam: An improved analytical method based on a CLND model. Appl. Phys. B 53/4, 268-270 (1991) PACS: 82.20W 33.80 42.60

Kauranen P., Andersson-Engels S., Svanberg S.:

Spatial mapping of flame radical emission using a spectroscopic multicolour imaging system.

Appl. Phys. B 53/4, 260-264 1991) PACS: 07.65 07.20 33.20

Kelly R., Braren B.:

On the direct observation of the gas-dynamics of laser-pulse sputtering of polymers. Part I: Analytical considerations. Appl. Phys. B 53/3, 160-169 (1991) PACS: 79.20 61.80 47.10

Kim G.-S., Hitchcock L.M., Rothe E.W., Reck G.P.:

Identification and imaging of hot O3 (v"=2,3, or 4) in hydrogen flames using 193nm- and 210nm-range light. Appl. Phys. B 53/3, 180-186 (1991) PACS: 33.20L 33.50 35.80 42.40

Kobayashi T .:

Nonlinear optical materials. Appl. Phys. B53/5&6, 273 (1991) PACS:

Kools J.C.S., Brongersma S.H., Riet E. van de, Dieleman J.:

Concentrations and velocity distributions of positive ions in laser ablation of copper.

Appl. Phys. B 53/3, 125-130 (1991) PACS: 52.50J 79.20

Kuik P., Dijkerman H.A., Heideman H.G.M .:

Possible excitation of a fast sodium beam by laser irradiation. Appl. Phys. B 53/4, 231-236 (1991) PACS: 32.00 42.60 32.80

Kuritsyn Yu.A., Makarov G.N., Mironenko V.R., Pak I.: Collisionless excitation of NH3 molecules via one- and two-photon tran-

sitions by multimode radiation of TEA CO2 laser. Appl. Phys. B 53/1, 58-64 (1991) PACS: 33.80 42.50

Labun A.H., Seguin H.J.J., Capjack C.E.:

A spark channel plasma electrode for a CO₂ laser gas discharge. Appl. Phys. B 53/4, 213-220 (1991) PACS: 52.80M 52.80 52.50

Lang P.T., Leipold I., Knott W.J., Semenov A.D., Gol'tsman G.N., Renk K.F.:

New far-infrared laser lines from CH₃Cl and CH₃Br optically pumped with a tunable high pressure CO2 laser.

Appl. Phys. B 53/4, 207-212 (1991) PACS: 42.55H 42.65

Li L., Lee J.Y., Yang Y., Kumar J., Tripathy S.K.:

Photoconductivity in a photocrosslinkable second-order nonlinear optical polymer.

Appl. Phys. B53/5&6, 279-281(1991) PACS: 42.65 72.40 78.65

Lüpke G., Marowsky G.;

Third-order processes and their relation to structural symmetry.

Appl. Phys. B 53/2, 71-81 (1991) PACS: 42.65

Lu Y.-F., Takai M., Nagamoto S., Namba S.:

Laser-induced dry chemical etching of Mn-Zn ferrite in CCl2F2 atmosphere.

Appl. Phys. B 53/1, 39-45 (1991) PACS: 75.50G 81.60

Meier B., Penzkofer A.:

Picosecond pulse generation in a benzene Raman generator amplifier

Appl. Phys. B 53/2, 65-70 (1991) PACS: 42.65C

Meier U.E., Raiche G.A., Crosley D.R., Smith G.P., Eckstrom D.J.: Laser-induced fluorescence decay lifetimes of shock-heated NO ($A^2\Sigma^+$). Appl. Phys. B 53/3, 138-141 (1991) PACS: 34.50G

Meier W., Plath I., Stricker W.:

The application of single-pulse CARS for temperature measurements in a turbulent stagnation flame.

Appl. Phys. B53/5&6, 339-346(1991) PACS: 33.20 42.65

Mortazavi M.A., Knoesen A., Kowel S.T., Henry R.A., Hoover J.M., Lidsay G.A.:

Second-order nonlinear optical properties of poled coumaromethyacrylate copolymers.

Appl. Phys. B53/5&6, 287-295(1991) PACS: 07.60H 42.65 42.80 78.65 Moskovets E.V.:

Optimization of the reflecting system parameters in the massreflectron. Appl. Phys. B 53/4, 253-259 (1991) PACS: 82.80M

Nassisi V.:

Experimental studies of a XeCl laser having UV preionization perpendicular and parallel to the electrode surfaces.

Appl. Phys. B 53/1, 14-18 (1991) PACS: 42.55 42.60

Nayak A.K., Sarkar S.K., Biswas D.J., RamaRao K.V.S., Mittal J.P.: Separation of tritium from deuterium by pulsed NH₃ laser-selective multiple photon dissociation of CTCl3. Appl. Phys. B 53/4, 246-249 (1991) PACS: 82.50 33.00

Nguyen Dai Hung, Meyer Y.H.:

Simple generation of 400-700 nm picosecond dye laser pulses with nanosecond laser pumping.

Appl. Phys. B 53/4, 226-230 (1991) PACS: 42.55M 42.60

Nicola S. de, Mormile P., Pierattini G.:

The temperature dependence of the refractive index of an aqueous suspension of polystrene micorspheres.

Appl. Phys. B53/5&6, 350-352(1991) PACS: 42.65 42.70 42.80

Péalat M., Lefebvre M.:

Temperature measurement by single-shot dual-line CARS in low-pressure flows.

Appl. Phys. B 53/1, 23-29 (1991) PACS: 07.60 82.80

Pfalzner S.:

Statistical description of ionization potentials in dense plasmas. Appl. Phys. B 53/4, 203-206 (1991) PACS: 31.20L 52.25 Pramatarov P.M., Stefanova M.S., Ganciu M., Karelin A.V.,

Yancharina A.M., Ivanova J.P., Yakovlenko S.I.:

Neon-hydrogen Penning plasma laser in a helical hallow-cathode discharge.

Appl. Phys. B 53/1, 30-33 (1991) PACS: 42.55F 42.60

Rabbani S.G., Shultz J.L., Salamo G.J., Sharp E.J., Clark III W.W., Miller M.J., Wood G.L., Neurgaonkar R.R.:

Color imaging in photorefractive crystals.

Appl. Phys. B53/5&6, 323-329(1991) PACS: 42.80 42.30 42.65

Raksi F., Heuer W., Zacharias H.:

A high-power sub picosecond distributed feedback dye laser system pumped by a mode-locked Nd: YAG laser.

Appl. Phys. B 53/2, 97-100 (1991) PACS: 42.55M 42.60

Sappey A.D., Gamble T.K.:

Laser-fluorescence diagnostics for condensation in laser-ablated copper nlasmas

Appl. Phys. B53/5&6, 353-361(1991) PACS: 36.40

Scherrer D.P., Kälin A.W., Kesselring R., Kneubühl F.K.:

Ultrashort far-infrared superradiant emissions optically pumped by truncated hybrid-10µm-CO₂-laser pulses. Appl. Phys. B 53/4, 250-252 (1991) PACS: 42.55H 42.60

Sekkat Z., Dumont M.:

Polarization effects in photoisomerization of azo dyes in polymeric films. Appl. Phys. B 53/2, 121-123 (1991) PACS: 82.50 78.65 42.80 Seppen C.J.E., Rikken G.L.J.A., Staring E.G.J., Nijhuis S.,

Venhuizen A.H.J.:

Linear optical properties of frequency doubling polymers. Appl. Phys. B53/5&6, 282-286(1991) PACS: 42.65K 78.65

Szatmári S., Almási G., Simon P.:

Off-axis amplification scheme for short-pulse amplifiers. Appl. Phys. B 53/2, 82-87 (1991) PACS: 42.60 42.55

Tauschwitz A., Michel L., Seelig W.:

Schlieren diagnostics of the plasma focus using a mode locked dye laser. Appl. Phys. B 53/2, 92-96 (1991) PACS: 42.80N 52.55 42.60

Toth C., Farkas G., Vodopyanov K.L.:

Laser-induced electron emission from an Au surface irridiated by single ps pulses at $\lambda = 2.99 \mu m$. The intermediate region between multiphoton and tunneling effects.

Appl. Phys. B53/4, 221-225 (1991) PACS: 32.80K 79.20 79.60 Vicari L., Bloisi F., Simoni F.:

Study of thermally induced optical bistability in a twisted nematic liquid

Appl. Phys. B53/5&6, 325-329(1991) PACS: 42.65 42.80 Wang L., Borthwick I.S., Jennings R., McCombes P.T.,

Ledingham K.W.D., Singhal R.P., McLean C.J.:

Observations and analysis of resonant laser ablation of GaAs. Appl. Phys. B 53/1, 34-38 (1991) PACS: 32.80t 32.90 79.20

Watanabe M., Hayasaka K., Imajo H., Umezu J.Urabe S.: Generation of continuous-wave coherent radiation tunable down to 190.8nm in β-BaB₂O₄. Appl. Phys. **B** 53/1, 11-13 (1991) PACS: 42.65C

Yoshizawa M., Yasuda A., Kobayashi T.:

Ultrafast optical response in polydiacetylenes and polythiophenes. Appl. Phys. B53/5&6, 296-307(1991) PACS: 42.62 71.35 78.65 YUE Xuefeng, LU Xinliang, SONG Yongyuan, SHAO Zongshu,

SUN Daliang, JIANG Quanzhong, CHEN Huanchu: Studies on self-pumped phase conjugation in Cu-doped

(K_{0.5}Na_{0.5})_{0.2}(Sr_{0.61}Ba_{0.59})_{0.9} Nb₂O₆ crystals. Appl. Phys. B53/5&6, 319-322(1991) PACS: 42.65H 42.70

ZHU Lei, LIN Fucheng: A picosecond CuBr Laser.

Appl. Phys. B 53/4, 265-267 (1991) PACS: 42.65R 42.60 42.55

